FORM 3

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

OMB APPROVAL

OMB 3235Number: 0104

Expires: 30, 2011

Estimated average burden hours per response... 0.5

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Fillit of Type nespon	565)							
1. Name and Address	of	2. Date of Event	3. Issuer N	3. Issuer Name and Ticker or Trading Symbol				
Reporting Person *		Requiring Statement	MRI INTI	MRI INTERVENTIONS, INC. [NONE]				
Barbre Carol J.		(Month/Day/Year) 02/27/2012						
(Last) (First)	(Middle)	02/21/2012	4. Relation	4. Relationship of Reporting			5. If Amendment, Date Original Filed(Month/Day/Year)	
C/O MRI				Person(s) to Issuer (Check all applicable) Director 10% Owner X Officer Other (give title below) (specify below)				
INTERVENTION:	S,							
INC., ONE COM	//ERCE		Directo					
SQUARE, SUITE	2550							
(Street)				Product Management		6. Individual or Joint/Group Filing(Check Applicable Line)		
, , ,								
MEMPHIS, TN 38	3103						_X_ Form filed by One Reporting Person	
·							d by More than One	
						Reporting Per	son	
(City) (State)	(Zip)	Table I - No	n-Derivativ	e Securit	ies B	eneficiall	y Owned	
1.Title of Security		2. Amou	nt of	3.	4. Na	ture of Indir	ect Beneficial	
(Instr. 4)			s Beneficially	•	Ownership			
		Owned		Form: (Instr		. 5)		
		(Instr. 4)		Direct (D) or Indirect				
				(I)				
				(Instr. 5)				
				,				
Reminder: Report on a separate line for each class of securities beneficially owned directly or								
indirectly.								
	Persons who respond to the collection of information contained in this							
	form are not required to respond unless the form displays a currently valid							
OM	B control nu	mber.						

Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)		Exercise	Ownership Form of	6. Nature of Indirect Beneficial Ownership
	Date Exercisable	Expiration Date	Title	Amount or Number of Shares	Price of Derivative Security: Security Or Indirect (I) (Instr. 5)	(Instr. 5)	
Stock Option (right to buy)	(1)	05/12/2018	Common Stock	7,500	\$ 6.04	D	
Stock Option	(2)	10/10/0000	Common	24.250	ф 1 О	ר	

(right to buy)	\-/	12/13/2020	Stock	34,∠3 0	φ 1.0	ט	
Stock Option (right to buy)	<u>(2)</u>	12/13/2020	Common Stock	34,250	\$ 1.8	D	

Reporting Owners

Reporting Owner Name / Address		Relationships					
		10% Owner	Officer	Other			
Barbre Carol J. C/O MRI INTERVENTIONS, INC. ONE COMMERCE SQUARE, SUITE 2 MEMPHIS, TN 38103	550		VP. Product Management				

Signatures

/s/ Oscar Thomas, by power of attorney for Carol J. Barbre	02/27/2012
Signature of Reporting Person	Date

Explanation of Responses:

- * If the form is filed by more than one reporting person, see Instruction 5(b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. *See* 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).
- (1) The shares subject to this option are immediately exercisable.
 - One-third of the shares subject to this option vested on the first anniversary of the grant date, December 13,
- (2) 2011. The remaining shares subject to this option vest ratably on the second and third anniversaries of the grant date, December 13, 2012 and December 13, 2013.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *See* Instruction 6 for procedure.

Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.